

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2019 Levee Inspection Results

Yolo County Department of Natural Resources

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2019 Levee Inspection Results

Yolo County Department of Natural Resources

Waterway			Bank	Unit Miles
Unit No. 01 Right Bank Cache Creek			Right	0.59
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/29/2019 - 3/29/2019			
DWR Inspector	Zach Jojola			
Accompanied By	Casey Leibler Yolo County Department of Natural Resources			
	Thomas Engler MBK			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2019

Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals				
DWR ID	DWR_NA0021_01_s _ 2012_5				
Comment Code					
Inspector Comment					
Yolo County has copies of the O&M manual.					

No Photos

LM Start		Rating **	A	Issue No.	11
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment				
DWR ID	DWR_NA0021_01_s _ 2018_11				
Comment Code					
Inspector Comment					
Yolo County OES maintains a stockpile of flood response material.					

No Photos

LM Start		Rating **	A	Issue No.	12
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training				
DWR ID	DWR_NA0021_01_s _ 2012_12				
Comment Code					
Inspector Comment					
Yolo County OES has a written response plan and response training.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2019

Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start	0.03	Rating **	U	Issue No.	23
LM End	0.07	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.720892 °	38.721020 °
				-121.810421 °	-121.809792 °
DWR ID	DWR_NA0021_01_s_2017_23				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
There is thick vegetation on waterside slope blocking visibility.					

Photo 1 of 2 : SP_2019_NA0021_351_23_20190304_00016.jpg



Wild vegetation on the waterside levee slope, Spring 2018.

LM Start	0.03	Rating **	U	Issue No.	23 (cont)
LM End	0.07	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2019_NA0021_351_23_20190304_00017.jpg



Wild vegetation on waterside levee slope, Spring 2017.

LM Start	0.03	Rating **	M	Issue No.	15
LM End	0.03	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.720895 °	38.720895 °
				-121.810408 °	-121.810408 °
DWR ID	DWR_NA0021_01_f_2015_15				
Comment Code					
DE : Debris					
Inspector Comment					
Concrete pipes are located on the waterside slope.					

Photo 1 of 1 : SP_2019_NA0021_351_15_20190304_00007.jpg



View of the debris on the waterward side of the levee. Fall 2015.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2019

Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start	0.09	Rating **	U	Issue No.	6
LM End	0.13	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.721086 °	38.721222 °
				-121.809451 °	-121.808650 °
DWR ID	DWR_NA0021_01_f_2018_6				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : SP_2019_NA0021_351_6_20190304_00002.jpg



View of the vegetation on the waterside slope. Fall 2018.

LM Start	0.14	Rating **	A/W	Issue No.	9
LM End	0.14	Issue Type +	Ob	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.721260 °	38.721260 °
				-121.808496 °	-121.808496 °
DWR ID	DWR_NA0021_01_f_2018_9				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					
There is longitudinal cracking on the crown and waterside slope. There is potential for sloughing within the crown. Recommend monitoring.					

Photo 1 of 1 : SP_2019_NA0021_351_9_20190304_00006.jpg



View of the longitudinal cracking on the crown and waterside slope. Fall 2018.

LM Start	0.19	Rating **	U	Issue No.	16
LM End	0.19	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.721536 °	38.721536 °
				-121.807711 °	-121.807711 °
DWR ID	DWR_NA0021_01_s_2015_16				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 3 : SP_2019_NA0021_351_16_20190424_00021.jpg



View of rodent hole on the landside slope next to power pole. Spring 2019.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2019

Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start	0.19	Rating **	U	Issue No.	16 (cont)	
LM End	0.19	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			38.721536 °		38.721536 °
				-121.807711 °		-121.807711 °
DWR ID	DWR_NA0021_01_s_2015_16					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						

Photo 2 of 3 : SP_2019_NA0021_351_16_20190304_00010.jpg



View of the rodent holes on the landward side of the levee looking downstream. Spring 2016.

LM Start	0.19	Rating **	U	Issue No.	16 (cont)
LM End	0.19	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : SP_2019_NA0021_351_16_20190304_00008.jpg



View of rodent holes on landside slope. Fall 2016.

LM Start	0.20	Rating **	M	Issue No.	7
LM End	0.20	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.721683 °	38.721683 °
				-121.807532 °	-121.807532 °
DWR ID	DWR_NA0021_01_s_2016_7				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 2 : SP_2019_NA0021_351_7_20190304_00003.jpg



Perspective view of the rodent hole on the landward side of the levee looking downstream. Spring 2016.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2019

Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start	0.20	Rating **	M	Issue No.	7 (cont)	
LM End	0.20	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			38.721683 °		38.721683 °
				-121.807532 °		-121.807532 °
DWR ID	DWR_NA0021_01_s_2016_7					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						

Photo 2 of 2 : SP_2019_NA0021_351_7_20190304_00004.jpg



Animal hole is close to the shoulder of the levee. Spring 2016.

LM Start	0.22	Rating **	M	Issue No.	8
LM End	0.22	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.721876 °	38.721876 °
				-121.807393 °	-121.807393 °
DWR ID	DWR_NA0021_01_s_2016_8				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2019_NA0021_351_8_20190304_00005.jpg



View of the rodent holes on the landward side of the levee looking downstream. Spring 2016.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2019

Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start	0.24	Rating **	M	Issue No.	24
LM End	0.24	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.722162 °	38.722162 °
				-121.807223 °	-121.807223 °
DWR ID	19554				
Comment Code					
Inspector Comment					
FS_ID:39855 DS_ID:19554 EP_NO: 6790 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Need to contact owner to determine if crossing is still active and to determine last inspection date. Will need copy of letter showing crossings passed inspection. FIELD_STRUCT_DESC: 6-inch steel natural gas pipeline through the levee, 4 feet below the crown. Pipe extends from borrow area and under the channel. Bleeder valve on the waterside (WS) bank. Service vault located on the landside (LS) next to access gate. Paved access ramp on the LS slope. (Plans to lower a 6-inch high-pressure gas main crossing Cache Creek authorized under Permit No. 6790, 1969 - Pacific Gas and Electric Company [PG&E]). [Additional Reference(s): DWR Levee Log, 2004]. FS Date: 4/16/2013					

LM Start	0.24	Rating **	M	Issue No.	24 (cont)
LM End	0.24	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_SP_2019_39855_69553.jpg



View of landward side near access gate. Gas line marker located on between trees. Line runs parallel to access roadway and through levee.

Photo 2 of 3 : UCIP_SP_2019_39855_69554.jpg



Service vault located on landward toe near gate access gate.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2019

Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start	0.24	Rating **	M	Issue No.	24 (cont)	
LM End	0.24	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.722162 °	38.722162 °	
				-121.807223 °	-121.807223 °	
DWR ID	19554					
Comment Code						
Inspector Comment						
FS_ID:39855						
DS_ID:19554						
EP_NO: 6790						
Repair Type: Non-Urgent						
Crossing Status: Indicator Found						
UCIP Comments: Need to contact owner to determine if crossing is still active and to determine last inspection date. Will need copy of letter showing crossings passed inspection.						
FIELD_STRUCT_DESC: 6-inch steel natural gas pipeline through the levee, 4 feet below the crown. Pipe extends from borrow area and under the channel. Bleeder valve on the waterside (WS) bank. Service vault located on the landside (LS) next to access gate. Paved access ramp on the LS slope. (Plans to lower a 6-inch high-pressure gas main crossing Cache Creek authorized under Permit No. 6790, 1969 - Pacific Gas and Electric Company [PG&E]). [Additional Reference(s): DWR Levee Log, 2004].						
FS Date: 4/16/2013						

Photo 3 of 3 : UCIP_SP_2019_39855_69555.jpg



View of gas line marker located on levee crown.

LM Start	0.27	Rating **	M	Issue No.	18
LM End	0.27	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.722615 °	38.722615 °
				-121.806952 °	-121.806952 °
DWR ID	DWR_NA0021_01_s_2015_18				
Comment Code					
EQ : Equipment					
Inspector Comment					

Photo 1 of 2 : SP_2019_NA0021_351_18_20190304_00011.jpg



Photo of equipment near LS toe of the levee. Fall inspection 10/07/2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2019

Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start	0.27	Rating **	M	Issue No.	18 (cont)	
LM End	0.27	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			38.722615 °	38.722615 °	
				-121.806952 °	-121.806952 °	
DWR ID	DWR_NA0021_01_s_2015_18					
Comment Code						
EQ : Equipment						
Inspector Comment						

Photo 2 of 2 : SP_2019_NA0021_351_18_20190304_00012.jpg



View of equipment on the landward side of the levee looking downstream. Spring 2015.

LM Start	0.27	Rating **	M	Issue No.	22
LM End	0.27	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.722620 °	38.722620 °
				-121.806958 °	-121.806958 °
DWR ID	DWR_NA0021_01_f_2015_22				
Comment Code					
RA : Ramp					
Inspector Comment					
There is an unauthorized vehicle ramp by owner on the waterside slope.					

Photo 1 of 3 : SP_2019_NA0021_351_22_20190304_00013.jpg



Perspective view of the trail on the waterward side of the levee looking downstream. Fall 2015.

LM Start	0.27	Rating **	M	Issue No.	22 (cont)
LM End	0.27	Issue Type +	En	Location *	WS

Photo 2 of 3 : SP_2019_NA0021_351_22_20190304_00014.jpg



View of the trail on the waterward side of the levee. Fall 2015.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2019

Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start	0.27	Rating **	M	Issue No.	22 (cont)	
LM End	0.27	Issue Type +	En	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			38.722620 °		38.722620 °
				-121.806958 °		-121.806958 °
DWR ID	DWR_NA0021_01_f_2015_22					
Comment Code						
RA : Ramp						
Inspector Comment						
There is an unauthorized vehicle ramp by owner on the waterside slope.						

Photo 3 of 3 : SP_2019_NA0021_351_22_20190304_00015.jpg



The trail seems to be an access point that leads down to Cache Creek.
Fall 2015.

LM Start	0.27	Rating **	A/W	Issue No.	14
LM End	0.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.722633 °	38.722633 °
				-121.806938 °	-121.806938 °
DWR ID	DWR_NA0021_01_s_2012_14				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	0.40	Rating **	M	Issue No.	2
LM End	0.48	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.724470 °	38.725567 °
				-121.806565 °	-121.806518 °
DWR ID	DWR_NA0021_01_s_2019_2				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

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Yolo County Department of Natural Resources

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Right Bank Cache Creek	Right	0.59	03/29/2019 03/29/2019	Zach Jojola

LM Start	0.45	Rating **	M	Issue No.	3
LM End	0.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.725115 °	38.725115 °
				-121.806527 °	-121.806527 °
DWR ID	DWR_NA0021_01_f_2017_3				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2019_NA0021_351_3_20190304_00001.jpg



Rodent holes on landward hinge point. Fall 2017.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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